

Exercise 1 Melinda grows a unique type of mango known for its sweetness and smoothness. Because of this, the price of a mango increases with the distance from Melinda's farm. The function M gives the price of a mango in dollars given the distance x in miles from Melinda's farm:

$$M(x) = \frac{1}{100}x^2 + 4$$

(a) Compute $AV_{[1,10]}$.

$AV_{[1,10]} = \$\boxed{1.11}$ per mile from Melinda's farm.

(b) Compute $AV_{[200,300]}$.

$AV_{[200,300]} = \$\boxed{5}$ per mile from Melinda's farm.
